ROKSAN

Kandy

STEREO POWER AMPLIFIER

USER MANUAL

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Congratulations on your purchase of the ROKSAN Kandy Power Amplifier. This power Amplifier is designed and manufactured to the highest specification and rigorously tested to offer you many years of trouble-free pleasure.

Your Kandy Amplifier is at the heart of your Hi-Fi / Audio-Visual system. Its correct installation, set-up and operation will have a profound influence on the sonic performance of the entire installation.

Please read the contents of this manual thoroughly. It will help you to understand better your Hi-Fi / Audio-Visual equipment and enhance your listening pleasure.

This manual is divided into the following sections:

- Safety Instructions (Accompanying card)
- Introduction
- Cautions
- Installation
- Set-up
- Operation
- Troubleshooting
- Guarantee
- Specifications
- Notes

UNPACKING

Included in the packing of your Kandy Amplifier you will find:

- One mains lead fitted with the correct mains power plug for your country
- One information pack and warranty card

After removing these items please retain **all** packing materials. Correct packing is necessary for future transportation of your Kandy Amplifier.

MAINTENANCE

After disconnecting the Kandy Amplifier from the mains supply, the cabinet and front panel may be cleaned with a lightly dampened soft cloth or chamois leather. **Avoid using abrasives or solvents.**

EU DIRECTIVES

This product is designed to comply with the legal provisions of EU Directives 89/3336/EC and 72/23/EC. The standards which have been applied are those which were in force at the time of the introduction of this product.

This product bears the CE mark.

CE

This product is compliant to EN 60065.

This product must be earthed. Please ensure that other equipment connected to it is earthed according to the manufacturer's instructions.

AC MAINS SUPPLY

Your Kandy Power Amplifier is set to operate from a fixed supply voltage which is marked on a label next to the mains input plug. Before connecting the mains lead please check that your mains supply corresponds to this label as below:

230V Products ……Voltage Range: 220V – 240V
115V Products ……Voltage Range: 100V – 120V

The mains lead supplied with this product has an IEC mains socket that plugs into the IEC connector on the unit's rear panel. The other end is normally attached to the appropriate mains plug for your country. In the UK this is the standard UK13A plug.

This plug should ordinarily not be removed from the lead. If you *do* remove it, please dispose of it safely so that it cannot be plugged into a mains socket whilst in a potentially dangerous condition. We suggest that you obtain from your dealer a complete replacement lead.

Should you move to another area where either the mains voltage or the mains plugs are different from those as supplied with your Power Amplifier, please contact the appointed ROKSAN distributor for assistance.

Please observe correct mains polarity at all times.
The Kandy Power Amplifier mains fuse is located on the rear panel next to the IEC mains connector. This must only be replaced by the fuse of the type and rating as described on the fuse rating label on the rear panel of the unit.

This product requires connection to electrical earth (ground). The earth wire (in the UK this is colour coded green/yellow) of the mains cable supplied with your Power Amplifier must be connected to a suitable grounding point established for this purpose by your electricity supply company. If you are in any doubt, consult a qualified electrician.

If the equipment is likely to be unused for some time, unplug it from the mains supply.

GENERAL CAUTIONS

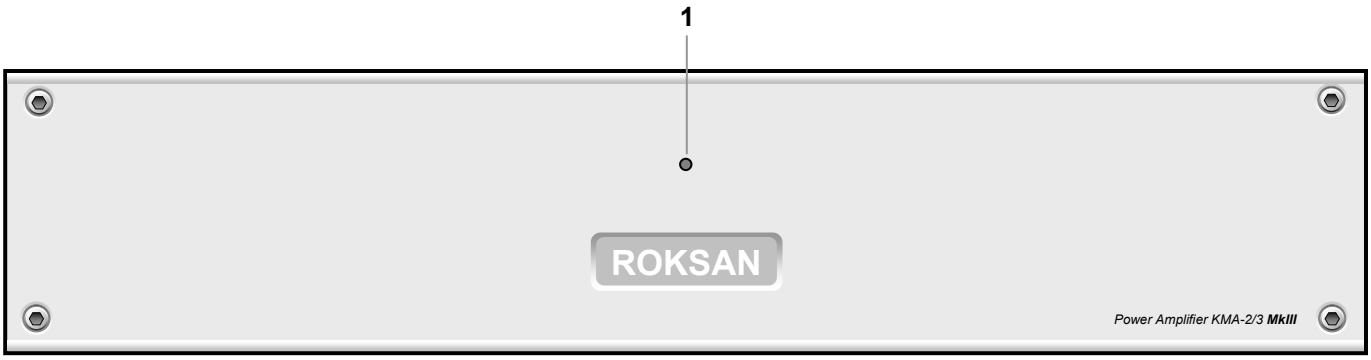
FCC WARNING
This equipment may generate or use Radio Frequency energy. The user may lose the right to operate this equipment if unauthorised modifications are made.

INTERFERENCE
Properly installed, this unit should not cause harmful interference to radio communications, There is, however, no guarantee that such interference will not occur in a specific installation. If interference arises (which you can determine by switching the unit off and on) you could try to remedy matters by the following:

- Re-orient or re-locate the receiving antenna
- Increase the distance between the Kandy Power Amplifier and receiver
- Connect the unit to a different mains circuit from that of the receiver
- Consult your ROKSAN appointed dealer or an experienced Radio/TV technician for help and advice

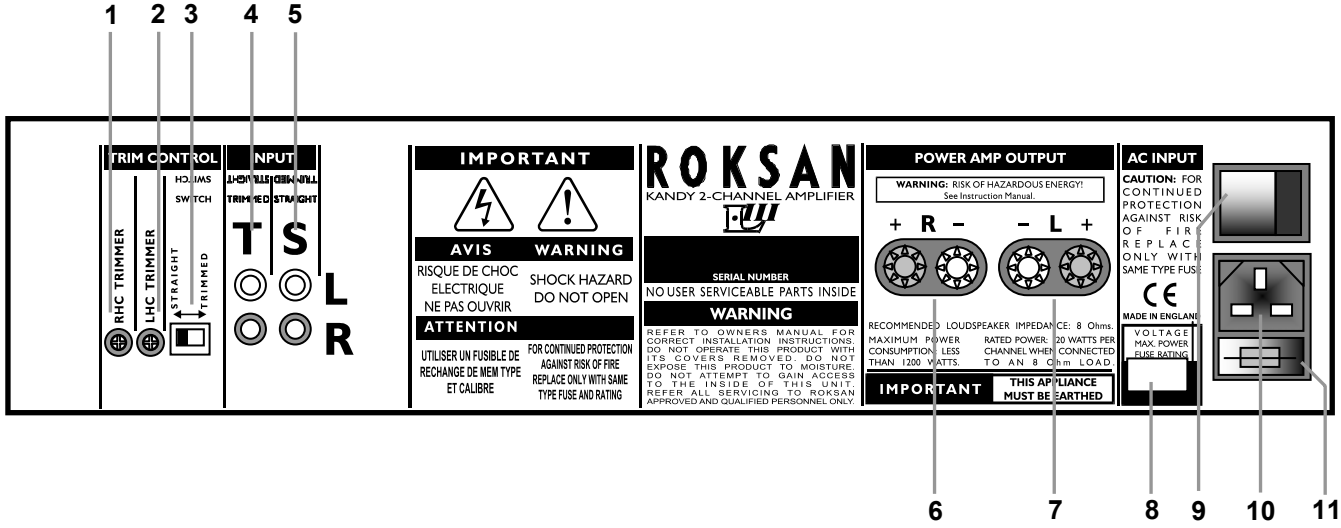
LOCATION
Your Kandy Power Amplifier should be located in a well ventilated area and kept away from sources of heat, dust and humidity and from direct sunlight.
The Kandy Power Amplifier may be positioned either as a free standing unit or alongside another audio/video product.
Never place the Power Amplifier on carpet or any surface likely to hinder normal ventilation.
Never allow liquids or other objects to fall into the unit.
This unit contains no user serviceable parts. **Do Not remove any panels or attempt to service it yourself.** Unauthorised servicing will void the warranty.

ROKSAN Kandy Power Amplifier- Front Panel View



1. Mode Indicator Light

ROKSAN Kandy Power Amplifier - Rear Panel View



1. Right Channel Trimmer
2. Left Channel Trimmer
3. Straight/Trimmed Input Selector Switch
4. Left & Right Channel Trimmed Inputs
5. Left & Right Channel Straight Inputs
6. Right Speaker Output
7. Left Speaker Output
8. Voltage & Fuse Label
9. AC Mains Power Switch
10. AC Mains Input
11. AC Mains Fuse holder

CONNECTING MAINS POWER

Please refer to rear panel view on Page **4**. The moulded IEC connector of the supplied mains lead should be plugged into the socket **(10)** on the rear of the unit first and then plugged into the mains supply. The Mains power switch **(9)** is on the rear panel of the Amplifier. This switch is normally left on. If the unit is likely to be unattended for a long period, switch it off and unplug the mains lead from the wall.

SIGNAL CONNECTIONS

Signal Input Connections:

There are two types of input on the Kandy Power Amplifier, the **'T'** column of **L** & **R** **'Trim-able'** Inputs **(4)** and the **'S'** column of **L** & **R** **'Straight'** Inputs **(5).**

Input Selector Switch **(3)** should be set to 'Straight' or 'Trimmed' according to the inputs that are intended for use.

All the inputs use Gold plated RCA Phono Connectors and should be connected according to the standard convention – **Right Channel – Red;** **Left Channel – Black or White**.

Also in accordance with standard practice, the Upper row of Phono Sockets carries the Left Channel and the Lower row carries the Right Channel.

The Input Sockets are labeled with their legends upside down as well as the normal way up to assist you should you be connecting an input from a position in front of and above the amplifier.

Straight Input Connections:

First set the Input Selector Switch **(3)** to **'STRAIGHT'**. If you wish to use the amplifier for multi-amping with the Kandy Integrated or purely as a power amplifier, you should connect the pre out of your Kandy Integrated , pre-amplifier or surround sound processor to the corresponding Straight Input. The gain of the Kandy Power Amplifier is exactly the same as the power amplifier section of the Kandy Integrated Amplifier and therefore is ideal for Multi-amping (Bi-amping, Tri-amping etc.)

IMPORTANT NOTE: For optimum performance it is recommended to use high quality inter-connect cables such as **ROKSAN HDC-02A** high definition analogue Cable.

Trimmed Input Connections:

First set the Input Selector Switch **(3)** to **'TRIMMED'**. If you wish to use the amplifier for Multi-channel A/V, ***directly*** connected to the Kandy DVD 5.1 Dolby Audio output, or as a power amplifier in an installation requiring its output level to be trimmed down, then the Trimmed Inputs should be used. (e.g. You should connect the Kandy DVD audio output to the corresponding Trimmed Input of the Kandy Power Amplifier)

These Inputs can then be fully trimmed down by using the Trimmers **(1, 2)** on the back panel.

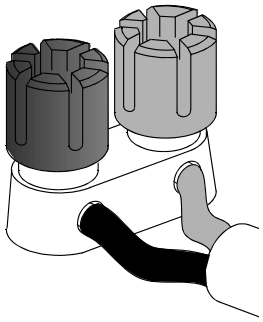
IMPORTANT NOTE: It is always better to use the **Straight** Inputs when there are no requirements for level adjustment.

LOUDSPEAKER CONNECTIONS

The **Right** and **Left** loudspeakers are connected to the amplifier via the rear panel binding posts **(6)** and **(7)** respectively. There are two basic types of cable –

- ***Figure 8 cable*** has two insulated conductors that lie parallel, either side by side, or spaced by insulation.
- ***Overall sheathed cable*** has both conductors insulated and enclosed in an overall plastic sheath.

Carefully remove any overall sheath or split the figure 8 cable to a depth of about 75mm (3”). Carefully strip the insulation on each wire to a depth of about 12mm (1/2”) exposing the bare core. If the conductor is stranded, twist the strands together on each conductor. Unscrew the binding post. There is a cross-hole about 5mm from the panel end of the binding post. Insert the bared conductor through the hole and tighten the binding post securely making sure that there are no loose strands or bare ends protruding through the post.
Carefully observe polarity ensuring that the RED (+) speaker terminal is connected to the RED (+) amplifier terminal and the BLACK (-) speaker terminal to the BLACK (-) amplifier terminal.
When all the channels are connected to their respective speakers the amplifier is ready for use.

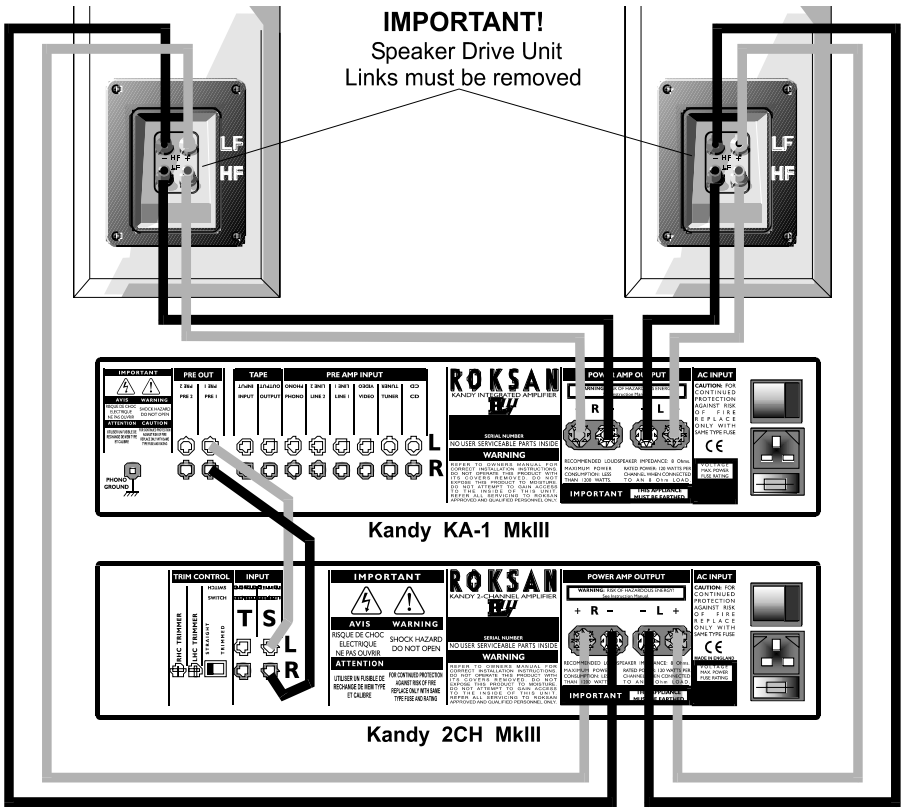


IMPORTANT NOTE: For optimum performance it is recommended to use high quality cables such as **ROKSAN HDC-02S** High Definition Loudspeaker Cable. Many speaker cables such as the ROKSAN HDC-02S are directional. Please observe this directionality. DO NOT use a speaker cable with conductor size less than 16 AWG (1.6mm Diameter). The Binding posts accept conductor sizes up to 12 AWG.

Multi-Amping The Loudspeakers *Set-up*

If the Loudspeakers utilise more than one drive unit with individual input terminals, for example a Tweeter and a Woofer, then the loudspeaker performance will greatly benefit from Bi-Amping. Dedicating one amplifier to the Tweeter and another to the Woofer isolates them from each other hence reducing distortion and increasing reserved power. Speakers work far better with most amplifiers when Multi-Amped than using one yet more powerful amplifier.

Bi-amplified Speakers

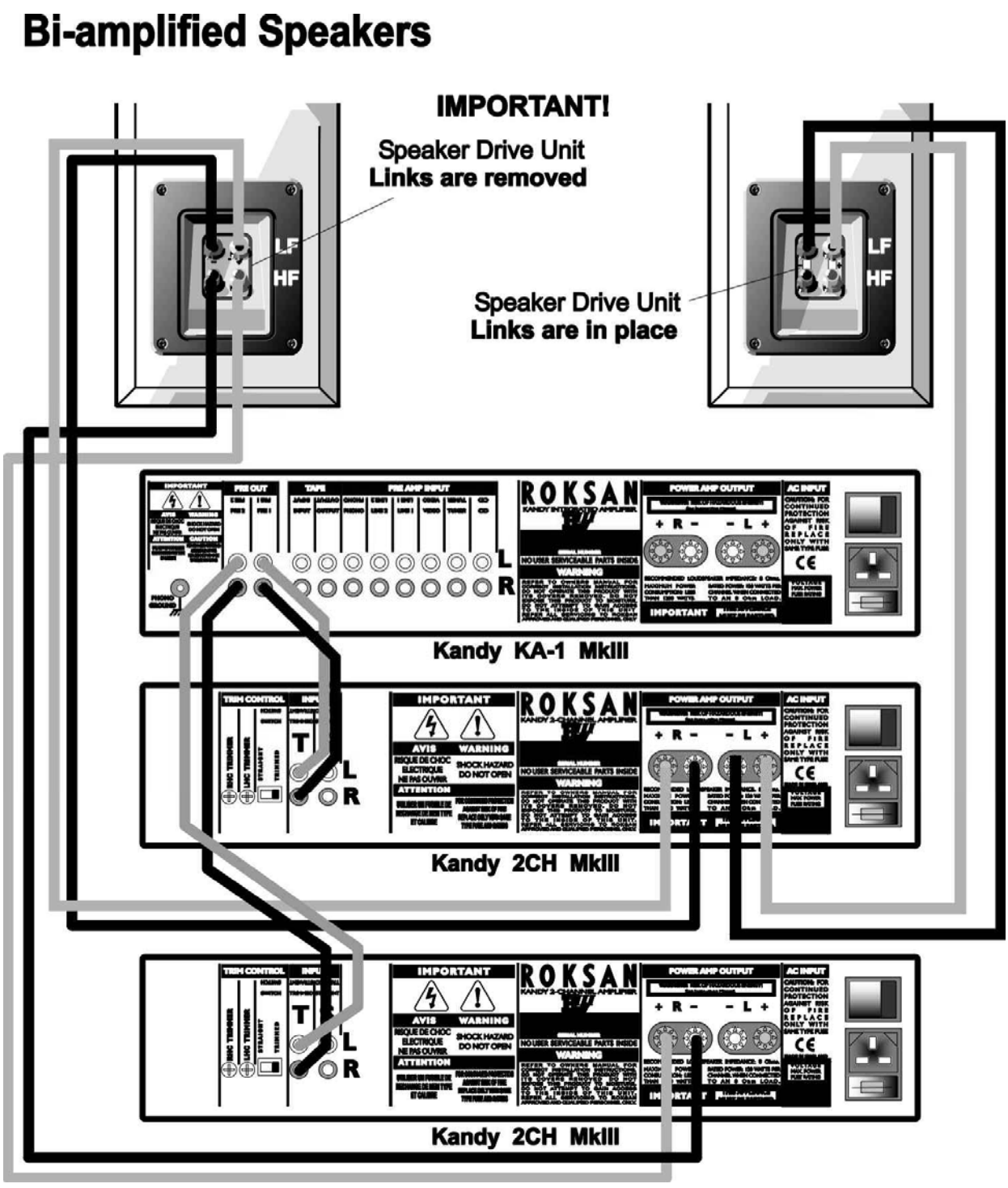


NOTE:

Kandy Integrated Amplifier **MkI** & **MkII** do not have pre out sockets for multi-amping.

If the loudspeakers have more drive units you just add more 2-channel amplifiers and connect respectively.

Using the Kandy Integrated Amplifier and Kandy Power Amplifier 2-channel:



CONNECTION NOTES:

1. Connect the Integrated Amplifier **L** & **R** Pre outputs to the **L** & **R** Trimmed inputs of the 2-channel Power Amp
2. Connect **L** & **R** speakers to the 2-Channel Power Amplifier **L** & **R** speaker outputs
3. Switch to the 'TRIMMED' input on the back
4. Carefully adjust the **L** & **R** trimmers to achieve the required level.

*Please refer to the front and rear panel views on page **4**.*

SWITCHING ON

The Mains power switch **(9)** is located on the rear panel of the amplifier. This switch should be left ON for normal operation. If unattended for a long period, the Mains power should be switched OFF and the lead disconnected from the power supply.

When switched ON from the rear panel, your Kandy Power Amplifier will go to Operational mode and the MODE indicator light **(1)** on the front will glow RED. The amplifier is now ready for use.

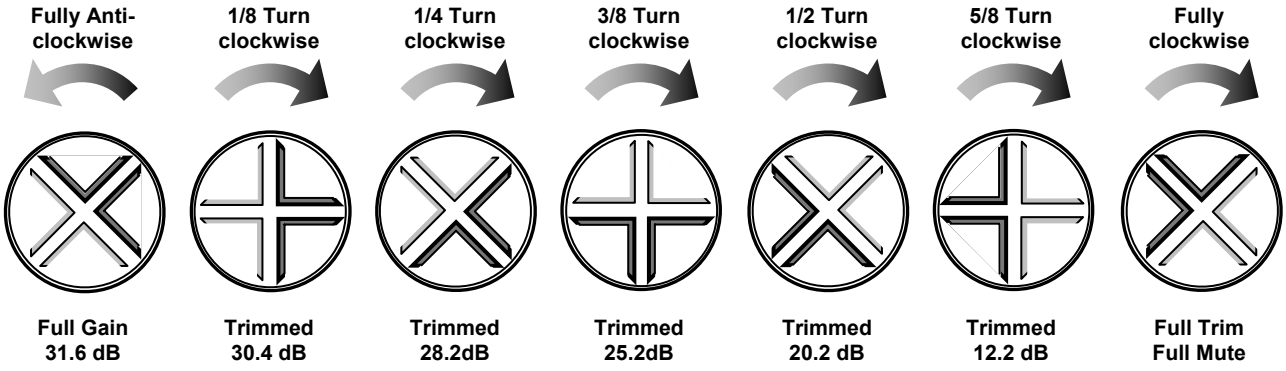
1 If there is no signal (or the signal level is very low) the MODE indicator light will change to AMBER after approximately 2 minutes
2 If there is still no signal after approximately 15 minutes, the amplifier will revert to Standby mode and the MODE indicator light will glow GREEN
3 As soon as there is a signal the Kandy Power Amplifier will 'wake up', the MODE indicator light will glow RED and after a couple of seconds the outputs will be activated.

USING THE TRIMMERS

*Please refer to the rear panel views on page **4**.*

There are **two** Trimmers **(1 & 2)**, accessible from the back panel, that can be utilised to reduce the input level to the individual channels and thus reduce the output level. In this configuration the input signal to that channel must be connected to its Trimmed Input socket **only** *(not the Straight Input)* and the selector switch must be set to Trimmed. When connected as such the gain on that channel can be reduced as indicated below.

NOTE: *To avoid damage to the trim pots always use a good quality **flat blade electrical trimmer**.*



NOTE: These values and positions are approximate and should be used as a guide. During the installation and set-up, you should adjust the trimmer to achieve the desired output level.

If you suspect that your ROKSAN Kandy Power Amplifier is not operating properly, you should check all the connections carefully. Pay particular attention to speaker phasing and channel connections. Phono plugs should be fully inserted- a frequent cause of problems is that Phono plug surrounds do not make proper contact. Below are some commonly encountered problems with suggestions for possible cure. The list is not exhaustive: If you have any unresolved problems, please consult your appointed ROKSAN dealer or distributor.

SYMPTOM	LIKELY CAUSE	SUGGESTED REMEDY
No power	AC Mains lead not inserted properly Unit not switched on at rear panel	Ensure AC Mains lead is fully inserted Switch unit on at rear panel
No output on one or more channels	Missing or bad input signal connection Incorrect speaker connection	Check all input connections Check speaker output connections on rear panel
Lower output on one or both channels	Higher trim on one or both channels	Check trim level and adjust accordingly
Poor speaker imaging, lack of Bass output	Loudspeakers connected out of phase	Check polarity of speaker connections (especially important if Multi-wiring, Multi-amping)
Hum from speakers	Incorrect Grounding	Check Mains polarity and grounding on all connected equipment

There are no user-serviceable parts inside your Kandy Power Amplifier. If a fault should develop, refer any servicing to your appointed ROKSAN dealer, distributor or ROKSAN approved service agent.

Your ROKSAN Kandy Power Amplifier is guaranteed against any defect in materials and workmanship for a period of **two years** from the date of purchase.

This guarantee only becomes effective if the warranty card is validated by the ROKSAN retailer from whom the equipment was purchased and returned to ROKSAN within **28 days** of purchase.
This guarantee excludes:

1. Damage caused due to accident, missuse, neglect and incorrect installation, adjustment or repair.
2. Liability for damage or loss during transit from the retailer or purchaser to ROKSAN or its authorised distributor for the purposes of repair or inspection.

Carriage costs to ROKSAN shall be borne by the consignor.

All claims under this guarantee must be made through an authorised ROKSAN retailer.

If equipment returned for repair to ROKSAN is found on inspection to comply with the product specification ROKSAN reserves the right to make a charge for examination and return carriage.

Unauthorised servicing will void this guarantee.

Inputs	Straight (x2) Trimmed (x2)
Input Impedance	10 kΩ
Input Sensitivity (115W)	900mV
Outputs	Speaker L & R (x1)
Output Power	>120 Watts, into 8Ω both channels driven >185 Watts, into 4Ω both channels driven
Power Supply	500VA Ultra Low Noise Toroidal Transformer
Damping Factor	>110 (8Ω)
Frequency response	(-3dB), <3Hz – >100kHz Straight or trimmed input
Gain	31.6 dB Straight or untrimmed -50 dB *(Full Mute)* Fully trimmed
Harmonic Distortion	<0.005% 1kHz - 8Ω
Signal to Noise Ratio	100dBa (ref. 900mV)
Power Source	100V – 120V 50Hz / 60Hz 220V – 240V 50Hz / 60Hz
Power Consumption	Standby <25W, Full Power <800W
Dimension	432 x 380 x 90 (W x D x H) mm 432 x 380 x 105 (including feet)
Weight	14 Kg

Kandy Power Amplifier L.*III* Serial Number: ……

Purchase Date Year …… Month …….. Day ……..

ROKSAN Retailer Name: ……
Location: ……

Please keep a record for future reference